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Cruise Report
(South Texas OCS Project)

1. Ship: R/V DECCA PROFILER
2. Cruise Number/Leg: Decca Profiler No. 1
3. Area of Operations: South Texas OCS between Matagorda Bay and the U.S./Mexico international border. Work extended from the 30 ft. isobath to the shelf break at 600 ft. Area encompassed within 26°0'-28°25' N. latitude, and 95°57'-97°15'W. longitude.
4. Dates of Operations & Port Stops: Cruise period was from 3-17-77 to 3-21-77. The ship departed from, and returned to, the port of Corpus Christi, Texas.

5. Personnel & Affiliations:

Ship Captain: Gerald F. Ottmer (Decca Survey Systems, Inc.)

Chief Scientist: Gerald L. Shideler (U.S.G.S.)

Scientific Crew:

Ron Miller	(U.S.G.S.)
Ken Roberts	"
Fran Firek	"
Chuck Stelting	"
Cyndi Rice	"
Bill Allshouse	"
Stan Linquist	"
Ron Circe	"
Jack Kindinger	"
Pat Nichols	"
Neal Lillard	"

6. Purpose: The general scientific objective of the cruise was to obtain quasi-synoptic information on the suspended-sediment transport system within the South Texas OCS. Specific objectives consisted of the following: A) Obtaining samples of the water column for analyses of sediment texture and concentration, sediment mineralogy and trace metals, water chemistry, and coccoliths, in order to establish temporal variability patterns, B) Obtaining vertical transmittance-temperature profiles, in order to establish regional turbidity patterns, C) Casting drift bottles to measure surface currents during the cruise period.
7. Scientific Equipment: Equipment utilized includes: transmissometer system with temperature and depth sensors (Martek), precision depth recording system, 30-liter Niskin water-sample bottles, X-YY' plotter, EPC recorder, and portable chemistry laboratory for filtration work.

8. Navigation Techniques: The coastal inlet stations were positioned by radar navigation; these stations are: #1, 1A, 2, 9, 9A, 23, 23A, and 24. Other deeper water stations were positioned with LORAN-A.
9. Data Acquired: 1. Vertical transmittance-temperature profiles of the water column at 26 stations; 2. Three water-column samples (surface, mid-depth, bottom) at each of 26 stations. 3. A total of 312 drift bottles were cast:
10. Comments: This cruise was the fifth of six scheduled cruises designed to evaluate the temporal variability of suspended-sediment transport patterns within the South Texas OCS region. The remaining cruise is scheduled for May, 1977.
11. Tabulated Information:
 - a. Days at sea - 5
 - b. Working days at sea - 4
 - c. Total ship's track (km) - 900
 - d. Continuous data (km) - not applicable
 - e. Total number of stations - 26
 - f. Number of sample types: 78 water samples (3 samples at each of 26 stations); 26 vertical transmittance-temperature profiles.
12. Track Chart: Attached

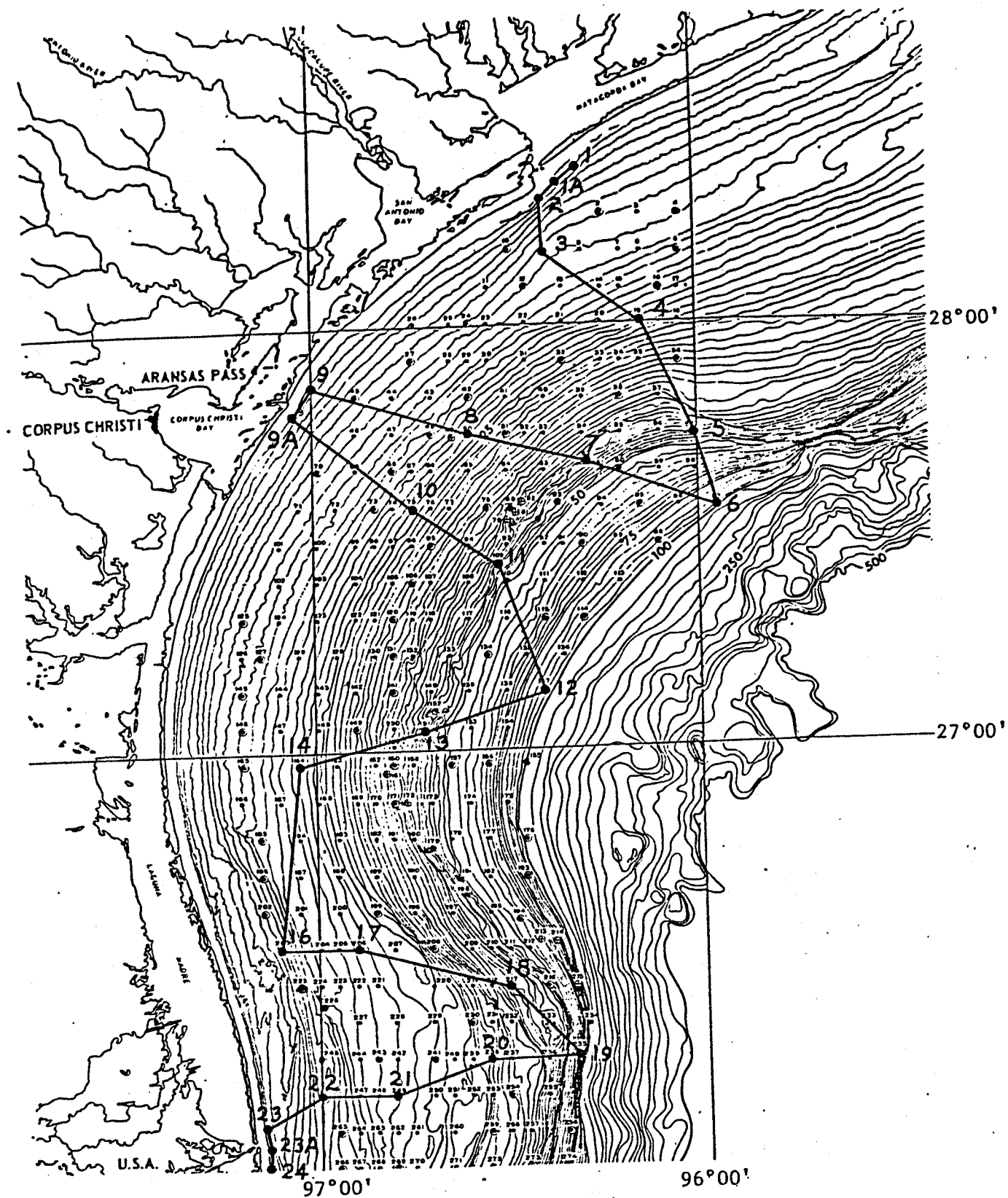


Figure 1 - Ship Track Chart